FIG. 1

(p.1a)

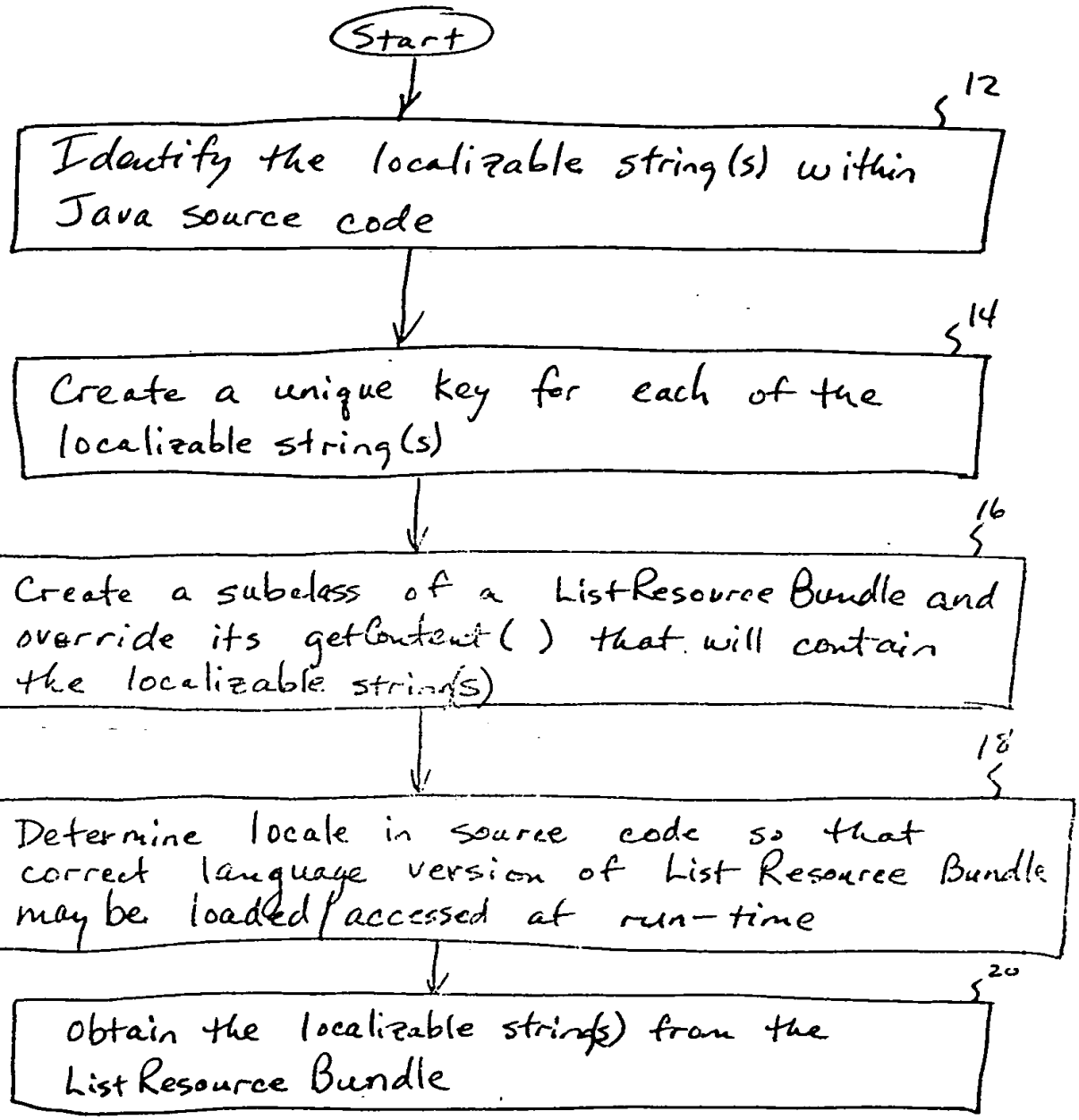

10
Start
12
Identify the localizable string(s) within Java source code
14
Create a unique key for each of the localizable string(s)
16
Create a subclass of a ListResourceBundle and override its getContent( ) that will contain the localizable string(s)
18
Determine locale in source code so that correct language version of ListResourceBundle may be loaded/accessed at run-time
20
Obtain the localizable string(s) from the ListResourceBundle

FIG. 2
(pla)

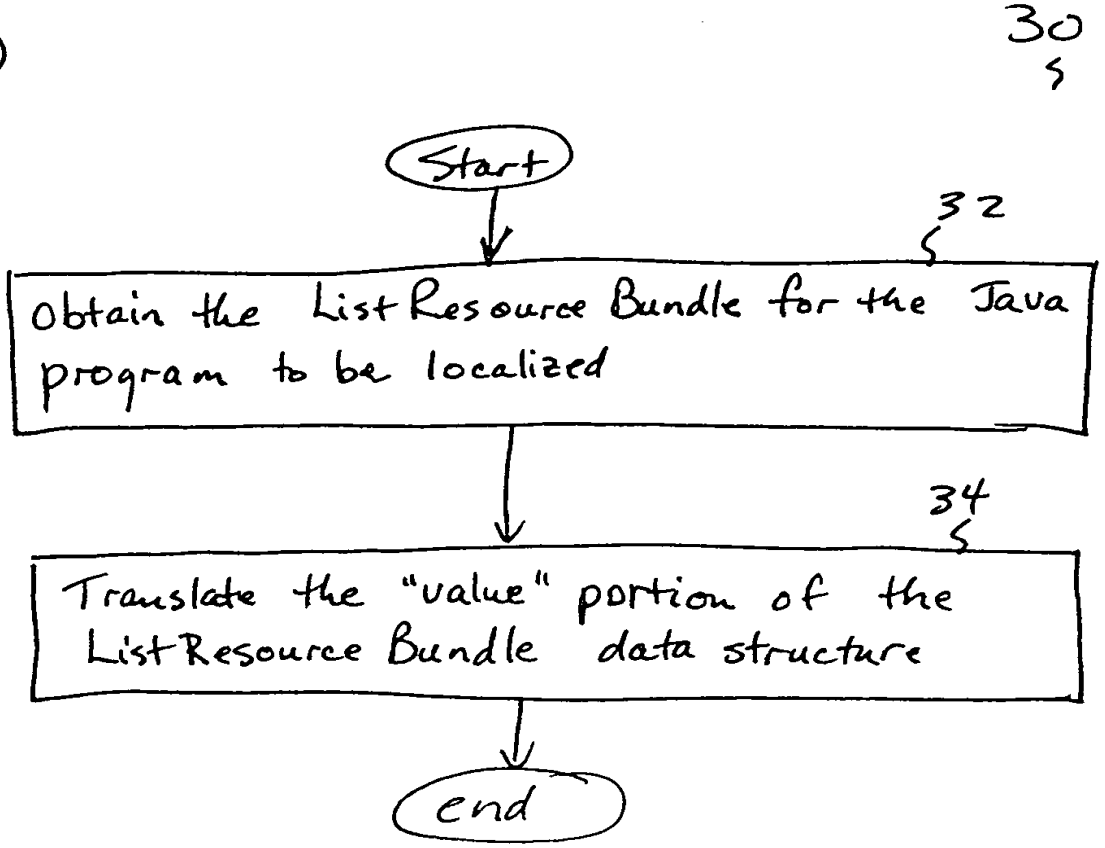


FIG. 3

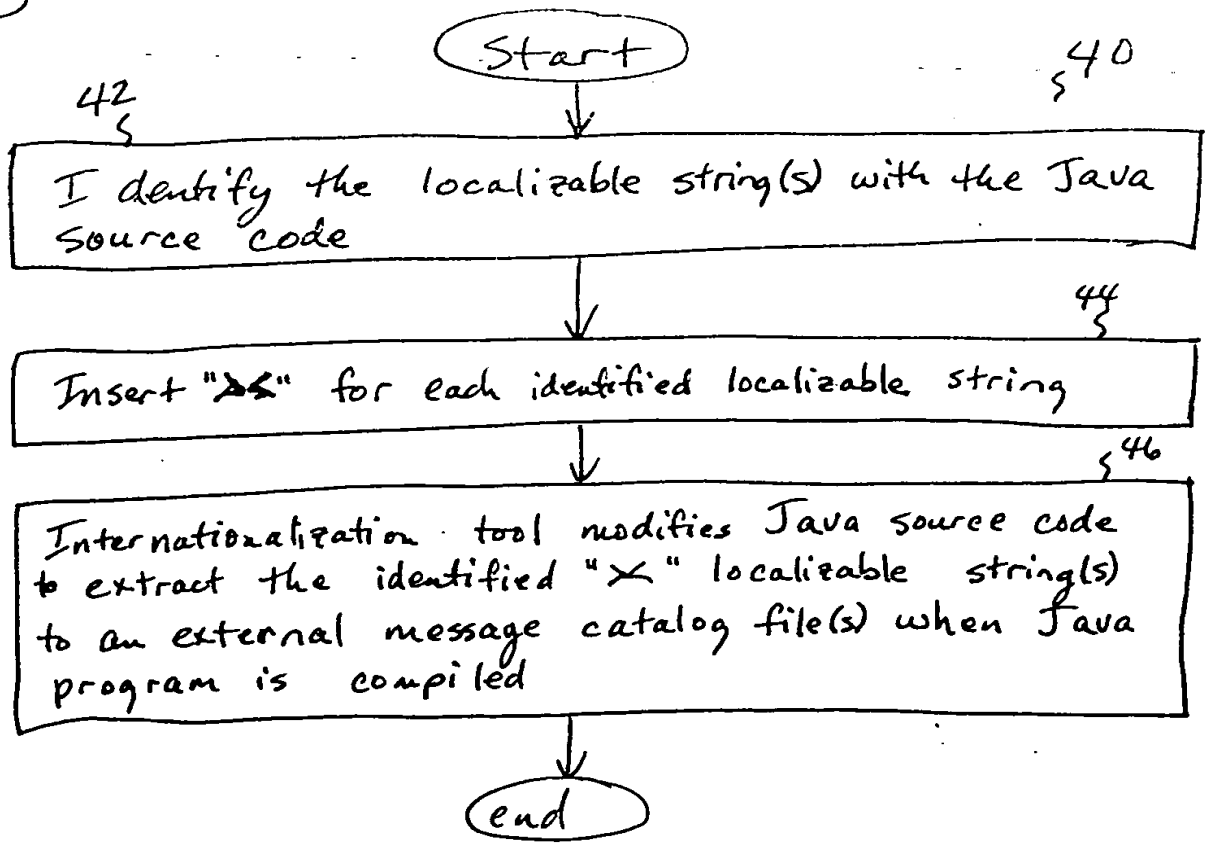


FIG. 4

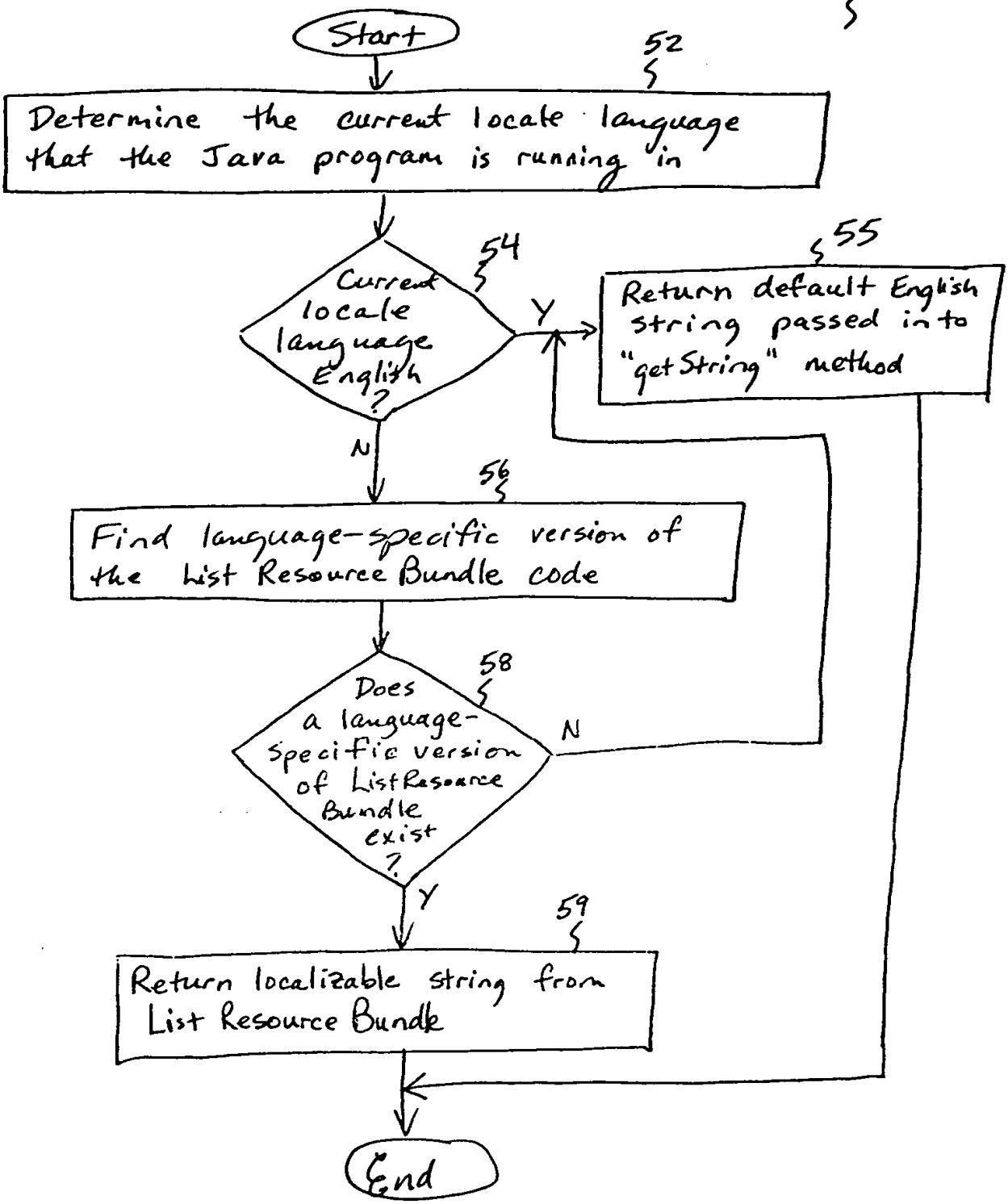

50
Start
52
Determine the current locale language that the Java program is running in
54
Current locale language English ?
Y
55
Return default English string passed in to "getString" method
N
56
Find language-specific version of the List Resource Bundle code
58
Does a language-specific version of ListResource Bundle exist ?
N
Y
59
Return localizable string from List Resource Bundle
End

FIG. 5

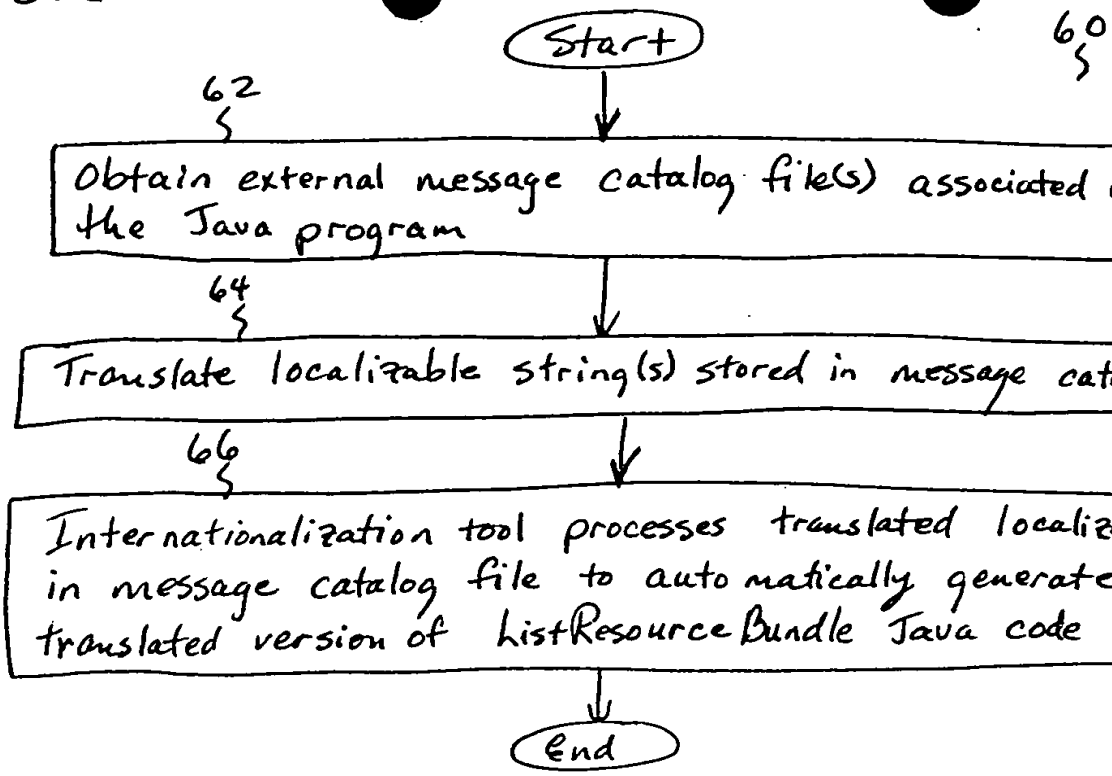

Start
60
62
Obtain external message catalog file(s) associated with the Java program
64
Translate localizable string(s) stored in message catalog file
66
Internationalization tool processes translated localizable strings in message catalog file to automatically generate translated version of ListResourceBundle Java code
End

FIG. 6

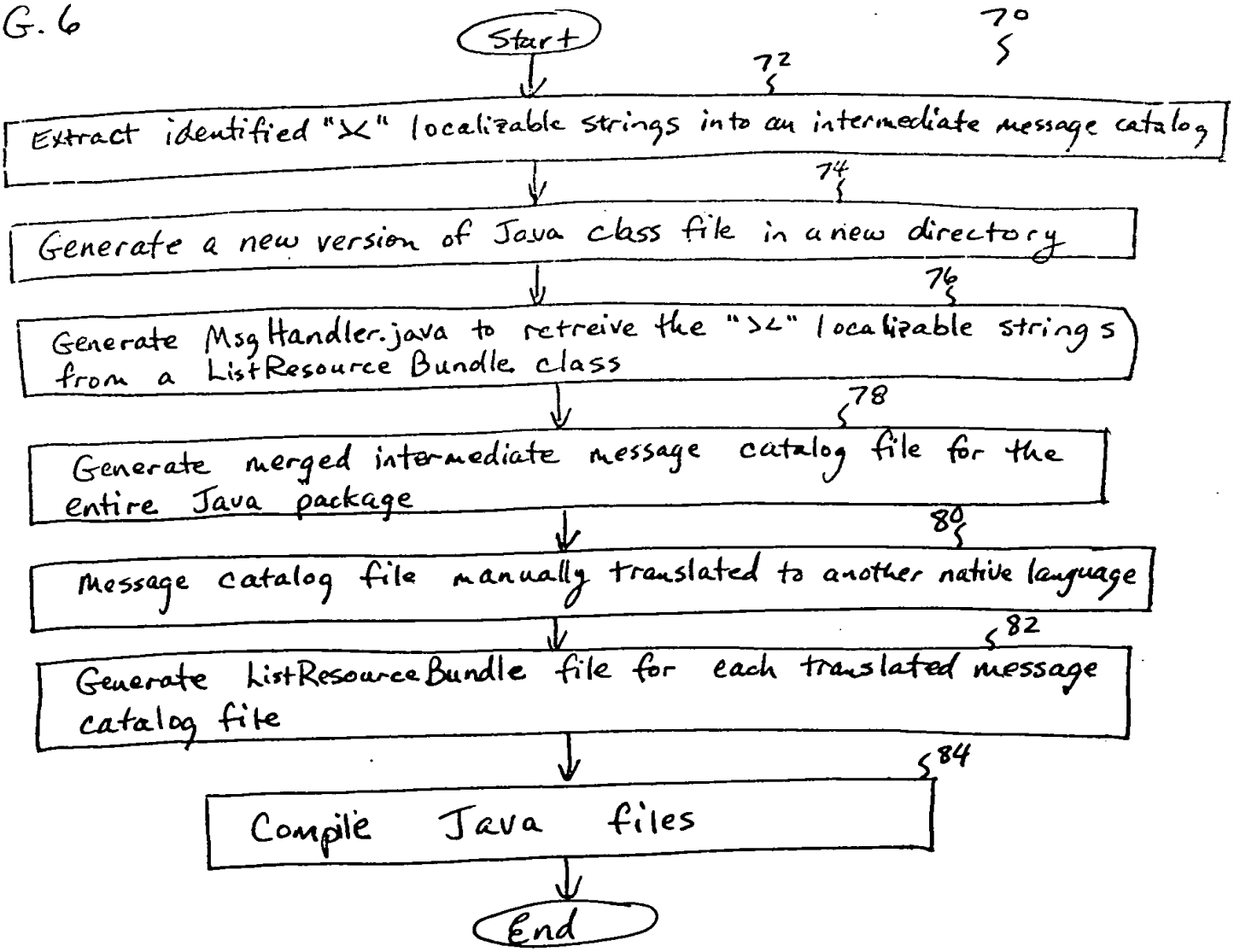
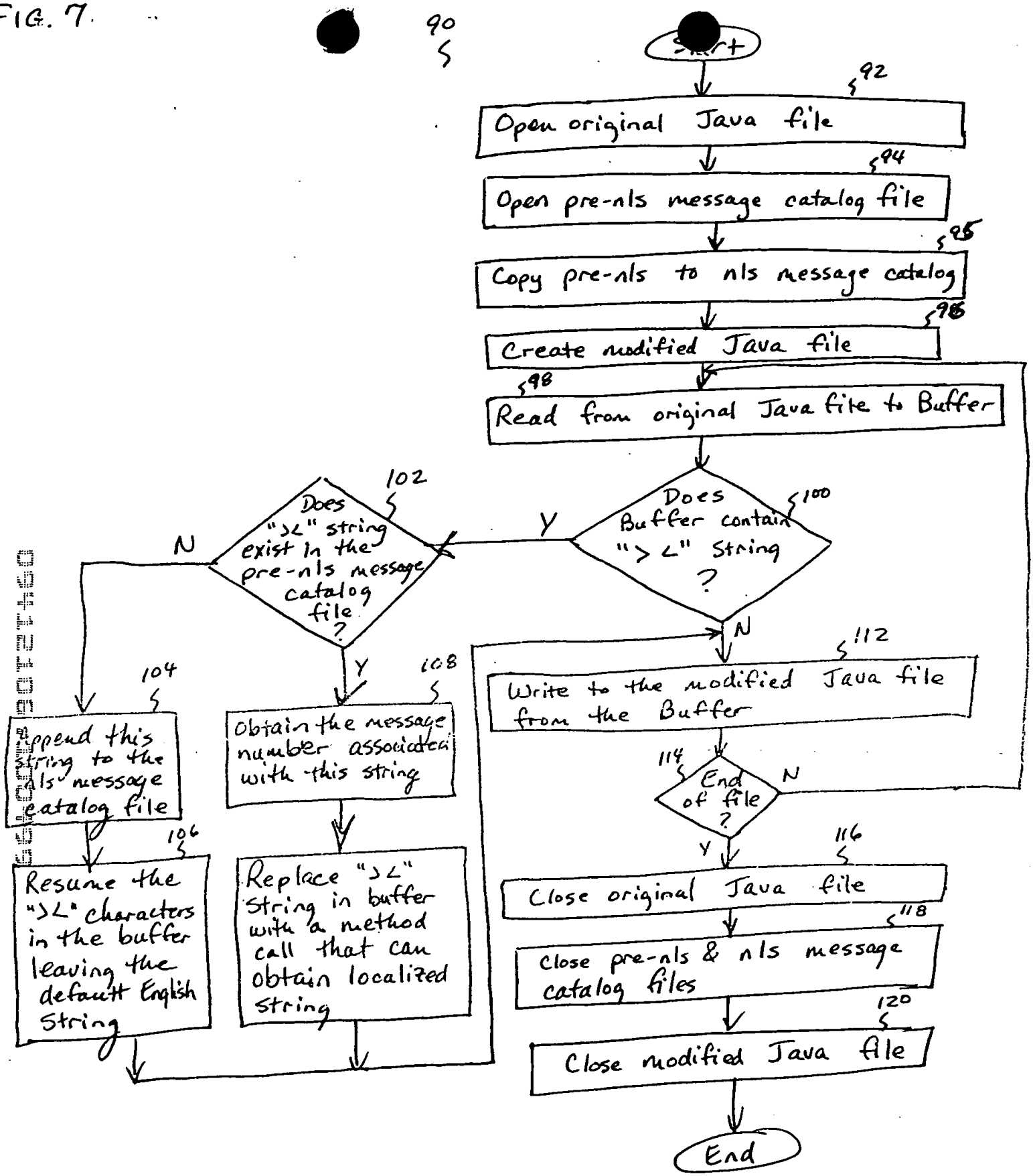

Start
70
72
Extract identified "X" localizable strings into an intermediate message catalog
74
Generate a new version of Java class file in a new directory
76
Generate MsgHandler.java to retreive the "X" localizable strings from a ListResource Bundle class
78
Generate merged intermediate message catalog file for the entire Java package
80
Message catalog file manually translated to another native language
82
Generate ListResourceBundle file for each translated message catalog file
84
Compile Java files
End

FIG. 7.


90
Start
92
Open original Java file
94
Open pre-nls message catalog file
95
Copy pre-nls to nls message catalog
96
Create modified Java file
98
Read from original Java file to Buffer
100
Does Buffer contain "><" String ?
Y
102
Does "><" string exist in the pre-nls message catalog file ?
N
Y
104
Append this string to the nls message catalog file
106
Resume the "><" characters in the buffer leaving the default English String
108
Obtain the message number associated with this string
Replace "><" String in buffer with a method call that can obtain localized string
N
112
Write to the modified Java file from the Buffer
114
End of file ?
N
Y
116
Close original Java file
118
Close pre-nls & nls message catalog files
120
Close modified Java file
End